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WATER SUPPLY OUTLOOK

rederal - State - Private Cooperative Snow Surveys

for

MONTANA

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE, and
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report. MAR. 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEBMAY)	PORTLAND, OREGON	- ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLANO, OREGON	- ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR MAY)	_ PALMER, ALASKA	_ ALASKA S.C.D.
AR I ZON A	SEMI-MONTHLY (Jan.15 - Apr.1)	_ PHOENIX. ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADD AND NEW MEXICO	MONTHLY (FEBMAY)	_ FORT COLLINS, COLORADO.	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
I OAHO	MONTHLY (JANJUNE).	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN JUNE)-	BOZEMAN. MONTANA	MONT. AGR. EXP. STATION
NEVA O A	MONTHLY (JANMAY)	RENO. NEVAOA	NEVAGA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON -	MONTHLY (JANJUNE)_	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN JUNE)_	_ SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON-	MONTHLY (FEB JUNE).	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEBJUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER
	PUBLISHED E	BY OTHER AGENCIES	
REPORTS	ISSUED		AGENCY
BRITISH COLUMBIA	MONTHLY (FEBJUNE)		ES SERVICE, DEPT. OF LANDS, R RESOURCES, PARLIAMENT BLDG., CANAOA
CALIFORNIA	MONTHLY (FEBMAY)	CALIF. DEPT. OF	WATER RESOURCES, P.O. BOX 388,

SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK

FEDERAL-STATE-PRIVATE COOPERATIVE SNOW SURVEYS

for

MONTANA

Report Prepared

Ву

Phillip E. Farnes

and

Stanley E. Cook

Snow Survey and Water Supply Forecasting Section
Soil Conservation Service
Box 855
Bozeman, Montana

Issued By

H. D. Hurd State Conservationist Soil Conservation Service Bozeman, Montana J. A. Asleson, Director Montana Agricultural Experiment Station Bozeman, Montana



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MONTANA
WATER SUPPLY OUTLOOK
as of
March 1, 1964

* The water supply outlook continued to improve * * throughout the state during the past month. * Adequate water supplies are anticipated for * most drainages in the state. Some late * season shortages are expected in the Red * Rock-Beaverhead, Marias-Milk, and Rock Creek- * * Clarks Fork drainages. ¥ * Mountain soil moisture varies from near aver-* age to below average, while storage in irri-* gation reservoirs is generally below average * with the exception of the Musselshell and * Yellowstone drainages. Larger multipurpose * and power reservoirs generally have above * average storage. *

West of the continental divide, streamflow is forecast to be slightly above average in the headwater area of the Clark Fork, 5 to 15 percent below average in the Flathead, and 5 to 10 percent below average in the Bitterroot River drainages. In the Kootenai drainage, spring and summer flow is expected to be about 10 percent below average.

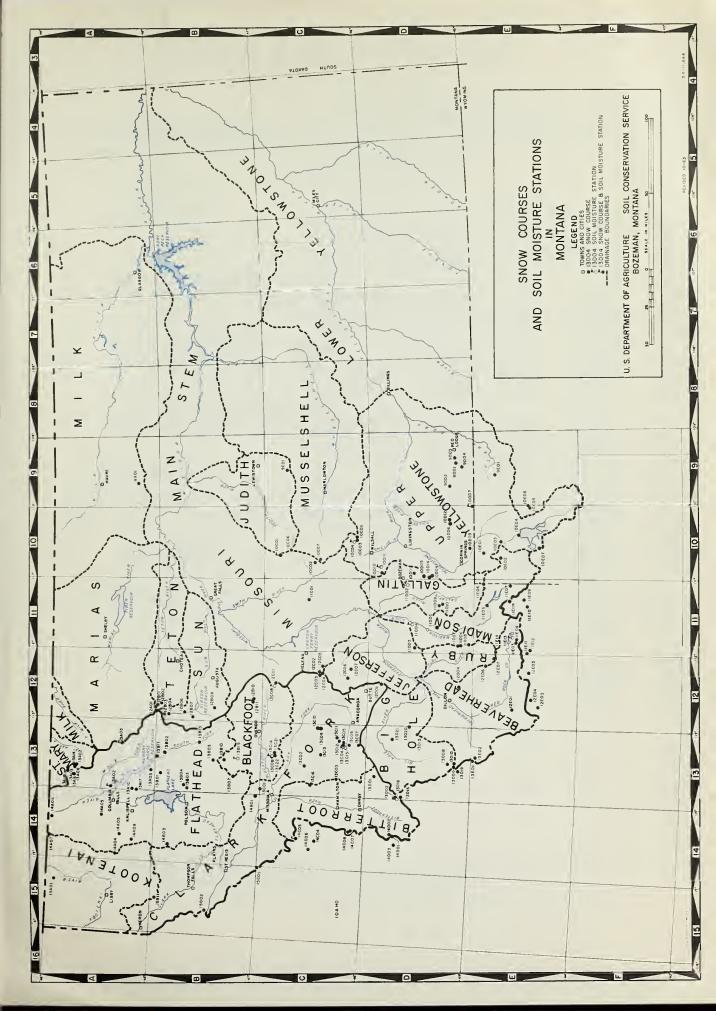
East of the divide, below average flows are forecast for all tributaries to the Missouri River except for the Gallatin drainage, small streams along the main stem of the Missouri River from Toston to Great Falls, and the Musselshell and Judith drainages.



In the Yellowstone River drainage all tributaries except the Shields are expected to produce below average flow. Some late season shortage is probable on the Rock Creek and Clarks Fork Rivers.

Snow accumulation west of the divide is 25 to 60 percent greater than last year and near to 10 percent below average. East of the divide, March 1 snow accumulation is 20 to 40 percent greater than last year and 10 to 20 percent below average in the Jefferson and Madison River drainages. In the Gallatin and along the main stem of the Missouri, it is 10 to 20 percent above average. The Yellowstone River has a snow pack that is 13 percent greater than a year ago and 91 percent of average.





INDEX TO MONTANA SNOW COURSES AND SOIL MOISTURE STATIONS

		9	NOW	cour	RSES											
Dreinage Beein & Course Fane	Number	Elev.	Sec.	<u>Twp</u> .	Range	Record Bogan	Heasuring Dates 1/	Mese. By 2/	Drainage Baein & Course Name	Rusber	Elev.	Sec.	Ivp.	Range	Record Began	Heasuring Dates 1
KOOTENAI RIVER			COLUM	IA RIVER	BASIN				GALLATIN RIVER							
Baree Creek Brush Creek	15B11 14A04	5500 5000	36 12	26N 30N	31W 26W	1956	3,4,5,5½	2	Arch Felle	10014	7350 8150	3	58 65	6E	1963	2,3,4,5
Red Kountain Weasel Divide	15A01 14A07	6000 5450	4 8	36N 37N	29W 2.4W	1937 1937 1937	3,4,5 3,4,5,5 2 ,6 3,4,5,5 2 ,6	1,2 1,2 1,2	Devil'e Slide Hood Meadow Little Perk	10D04 10003 11D10	8150 8100 6600 7400	14 22 22	55 45 65	3E 6E 6E	1963 1935 1935 1963	3,4,5 2,3,4,5, 6 2,3,4,5 3,4,5
FLATHEAD RIVER	14803	5150	2.7	2/1	201	1961	7.4.6) 5	New World Twenty-One Mile	10001 11E06	6700 7150	24	35 115	3E 6E 5E	19 <i>3</i> 9 1934	2,3,4 1,2,3,4,5
Bessoo Peak Big Greak Canp Misery Desert Neumein Fetty Greak Griffin Greek Divide Nell Roering Divide Nell Roering Divide Nell Roering Lippon Greak Marian Fess Hineral Greek North Fork Jocko Spotted Beer Hountain Strewborry Lake Trinkus Lake Trinkus Lake Trinkus Lake Trinkus Lake Trinkus Lake Trinkus Lake	13803 13817 13802 13804 14809 14803 13813 14806 14805 13816 13816 13807 13802 13810 13811	6750 6400 5600 5500 5150 5770 4530 3890 4300 5250 4000 6330 7000 5600 6500 3580	11 7 30 24 4 11 35 18 14 34 34 29 3 23 11 9 24	24N 22N 28N 31N 22N 28N 32N 21N 37N 30N 30N 35N 17N 25N 28N 25N	25W 18W 19W 18W 25W 22W 13W 22W 24W 14W 17W 15W 15W 16W	1941 1962 1937 1962 1960 1942 1951 1954 1937 1934 1957 1941 1948 1948 1948	3,4,5, 6 3,4,5, 6 3,4,5, 6 3,4,5, 6 3,4,5, 6 3,4,5 1,2,3,4,5,5,6 2,3,4,5 3,4,5 1,2,3,4,5 3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5	1,5 1,2 1,2 1,5 2 1 6 1,2 3 6 1,5 1,2 1	MISSOURL RVIRM MAIN STEM BRUIDER MOUNTAIN Ches mann Reservoir Crystal Lake Elk Peak Greshopper Minge Bill Missource Fin Milo Peas Ten Milo Lower Ten Milo Middle Ten Milo Milo Milo Milo Milo Milo Milo Ten Milo Milo Milo Milo Milo Milo Milo Ten Milo Milo Milo Milo Milo Milo Milo Milo	11C01 12C05 9C01 10C07 10C02 10C01 9A01 12C02 12C03 12C04	7950 6200 6100 8000 7000 7500 5200 6900 6250 6800 8000	1 2 19 10 19 34 15 16 13 13	9N 8N 12H 8N 9N 13N 28N 13N 8N 8N 8N	3E 5W 18E 8E 8E 16E 7W 6H 6H 5W	1963 1936 1941 1963 1938 1934 1941 1934 1935 1934	1,2,3,4,5 3,4,5 3,4,5 3,4,5 3,4,5 3,4,5 3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5 1,2,3,4,5
Upper Nolland Lake CLARK FORK RIVER	13B05	7000	28	20N	15W	1948	3,4,5	1	Pive-Bull Freight Creek Goet Hountain	12B09 12A01 12B07	5600 6000 7000	36 13 20	20N 26N 22N	10W 10W 10W	1948 1948 1934	3,4,5 3,4,5 3,4,5
Bleck Pine Copper Creek Cotter Mine Covote Nill	13C13 12B10 12B11 13B10 13C09	7100 5700 6250 4200 7800	23 1 2 12	8N 15N 15N 18N	15W 9W 9W 16W	1959 1962 1962 1947	3,4,5 3,4,5 3,4,5 1,2,3,4,5	1 1,2 1,2 1,2	Waldron Creek West Fork Wrong Creek Wrong Ridge	12B02 12B01 12B04 12803	5600 6060 5700 6800	20 16 6 32 17	25N 25N 25N 25N	9W 9W 10W 10W	1948 1948 1949 1949	3,4,5 3,4,5 3,4,5 3,4,5 3,4,5
El Deredo Mine Fred Burr Pess Gold Creek Lake Hoodoo Creek	13011 13010 15001	8000 7200 6200	23 12 14 9	6N 8N 14N	12W 13W 12W 27W	1949 1957 1949 1937	3,4 3,4,5 3,4 3,4,5	1 1 1,2	JUDITH RIVER Spur Park	10006	8000	20	12N	9E	1963	3,4,5
Intergeard Lubrecht Forest No. 3 Lubrecht Forest No. 4	13004 13021 13022	6450 5450 4650	6 19 23	5N 13N 13N	13W 14W 15W	1936 1951 1951	2,3,4,5 1,2,3,4,5 1,2,3,4,5	8	UPPER YELLOWSTONE RIVER	10005	aroo.			100	2062	2.46
Lubrecht Foret No. 6 Red Lion Skalkaho Summit Slide Rock Mountain Southern Cross Storn Lake Stuart Mountain Stuart Mountain Ty Mountain	13C08 13C12 13C03 13C02 13C05 13C07 13C06 13C01 14B01	4040 7100 7260 7100 6500 7780 6500 7400 6800	11 22 30 35 8 19 19 6 33	13N 6N 6N 10N 5N 4N 5N 14N	15W 13W 17W 16W 13W 13W 13W 19W	1951 1958 1937 1937 1936 1939 1936 1936	1,2,3,4,5 3,4,5 3,4,5,5\frac{1}{2},6 3,4,5 2,3,4 1,2,3,4,5 2,3,4 1,2,3,4,5,6 1,2,3,4,5,6	B 1 1 1 4 1 4 8 8	Bald Ridge Comp Senis Crovice Mountain Grizzly Peak Independence Monusent Peak Northeast Entrance Porcupine R. S. Timberline Croek Secajawe	10005 9001 10005 9005 10006 10012 10007 10003 9004 10010	7500 7890 8400 8400 8000 9000 7400 6500 8850 6550	11 2 22 26 22 22 22 33 10 10 36	4N 8S 9S 7S 7S 7S 7S 9S 4N 8S 2N	10E 18E 9E 19E 12E 12E 14E 10E 18E 6E	1961 1937 1935 1961 1940 1961 1937 1938 1961 1960	3,4,5 3,4,5 3,4 1,2,3,4,5 3,4,5 3,4,5 1,2,3,4,5 3,4,5 3,4,5 3,4,5
BITTEFFROOT RIVER									West Rosebud	9D02	7500 OIL M	9 1018T11	78 IRE STA	16E	1960	3,4
Ambrose East Fork R. S. Gibbons Pese	13016 13001 13002	6480 5400 71 00	28 16 4	9N 2N 2S	16W 17W 19W	1960 1937 1934	3,4,5 3,4 1,2,3,4,5,5½,6	1 1,3		31			IVER BASIN	XIION3		
Lost Norse Nez Perce Camp Nez Perce Pese	14007 14D02 14D01	5940 5580 6570	5 19 25	4N 1S 1S	23W 23W 24W	1960 1937 1937	3,4,5 3,4,5 3,4,5	1	FLATHEAD RIVER Desert Mountain	13A02M	5600	24	31N	19W	1956	Honthly
Tvin Lakee SASKATCHEVAN RIVER BASIN	1408	6510	32	5 N	23W	1960	3,4,5	1	Mariae Paes CLARK FORK RIVER	13A05M	5250	34	30N	14W	1950	Honthly
lceborg Lake No. 3 Josephine Lower No. 9 Mount Allen No. 7 Piegan Pees No. 6 Ptermigen No. 8	13A03 13A14 13A07 13A06 13A08	5600 4900 5700 5500 5800	1 22 27 27 36	35N 35N 35N 35N 36N	17W 16W 16W 16W 17W	1922 1955 1922 1922 1937	5 5 5 5	3,9 3,9 3,9 3,9 3,9	Georgetown Lake Lubrecht Forest Seeley Lake BITTERROOT RIVER	13015H 13014M 13819H	6450 4100 4030	6 11 21	5N 13N 17N	13W 15W 15W	1962 1961 1963	Monthly Monthly Monthly
		н	ISSOURI RI	IVER BASIN					Gibbons Pass Lolo Pass	13D18M 14C05M	7100 5250	11	25 10N	19W 24W	1962 1963	Honthly Honthly
BEAVERHEAD RIVER									BEAVERHEAD RIVER		E	ISSOURI R	IVER BASIN			
Bloody Oick Carter Craek Gold Stome	13010 12004 13D09	7600 7400 8100	12 22 11	8 \$ 8\$ 8\$	16W 7W 16W	1948 1963 1948	3,4,5 3,4 3,4,5 3,4,5	1 1 1	Lakeview	11E13H	6700	23	145	2W	1962	Monthly
Lakeview Cenyon Lakeview Ridge Lembi Pass	11E04 11E03 13E01	6930 7400 7480	26 27 9	14S 14S 10S	2W 2W	1948 1948 1948	3,4,5 3,4,5 3,4	10 10 1	MADISON RIVER Red Bluff	11D04M	4800	7	38	1E	1961	Monthly
Trail Creek White Pine Ridge	13E02 12E01	7090 8850	15 18	10S 14S	15W 15W 9W	1948 1948	3,4,5 3,4 3,4 3,4,5	1	GALLATIN RIVER College Site	11002H	4856	18	2.5	5E	1956	Monthly
RUBY RIVER Clover Meadow	11D08	8600	28	9\$	2W	1963	3,4,5	1	Twonty-One Mile MISSOURI RIVER MAIN STEM	11E06H	7150	1	115	SE.	1963	Monthly
Olvide Notch	12E07 12E06	7900 8500	14	12S 118	4M 4M	1963 1963	3,4,5 3,4,5 3,4,5	1	Stomple Page Kinge Hill	12008M 10001M	6350 7420	16 34	13N 13N	7¥ 6E	1963 1963	Monthly Monthly
BIG HOLE RIVER Abundance Lake	13020	6800	7	3S	11W	1963	3,4,5	1	YELLOWSTONE RIVER	1001114	6020	32	2N	7E	1960	Monthly
Darkhores Lake Elk Norn Springe Foolhen Jahnke Creek	13D19 13D15 13D21 13008	8600 7800 8500 7340	21 11 25	8S 4S 1S 7S	16W 12W 13W 16W	1963 1935 1963 1948	3,4,5 3,4,5 3,4,5 3,4,5	1 3 1 1	Northeast Entrence Shields River	10007H 10006M	7350 5850	33	9S ЦN	114E 10E	1962 1960	Honthly Honthly
JEFFERSON RIVER Berry Meadow	12007	7300	10	en	£1.1	1962	3 / 5	1				LEGEND				
Pienic Grounde Pipeetone Page MADISON RIVER	12007 12006 12001	7300 6500 7200	17 10 10	5N 5N 1N	5W 6W 7W	1941 1938	3,4,5 2,3,4 1,2,3,4,5	1 4 1	1/ Numerale 1,2,3,4,5,5½,						l, May l, M	uy 15 and June 1.
Call Road Crockett Lake Hobgen Oam Jack Creak North Headow West Yellowstone	11D07 11D06 11E05 11D05 11D03 11E07	8050 8400 6550 6800 7500 6700	21 20 22 13 23 34	86 85 115 66 33 135	2W 2W 3E 1E 3W 5E	1962 1962 1934 1961 1961 1934	3,4,5 3,4,5 1,2,3,4,5 3,4 3,4 1,2,3,4,5	1 1 3 1 1 3	2. U.S.Fo 3. U.S.Go 4. Montana	mervetion S prest Service cological Su Power Compa dian Service	eny mrvey	1	7. Montana 8. Montana	D Water &	nt Station ceatry School Power Bure	u

- 3. U. S. Geological Survey 8. Mostens State Forestry School
 4. Mostens Power Cospany 9. Desinton Water & Power Bureau
 5. U. S. Indian Service
 H Soil Moieture

	,,,,				(1000	Acre Feet)
		FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	COL	UMBIA RIVER	BASIN			
	KOOTENAI RIVER					
3030	Libby (at)	Apr-Sept Apr-July	6880 5879	89 88	7004 5987	7723 6694
3050	Leonia (at)	Apr-Sept	7876	88	8001	8907
0.5.5	NORTH FORK FLATHEAD RIVER	Apr-July	6823	87	6854	7817
3555	Columbia Falls (near)	Apr-Sept Apr-July	1690 1540	87 87	1619 1470	1942 1769
	MIDDLE FORK FLATHEAD RIVER	Apr-June	1300	87	1179	1491
3585	West Glacier (near)	Apr-Sept Apr-July	1652 1533	88 88	1486 1368	1882 1747
	SOUTH FORK FLATHEAD RIVER	Apr-June	1302	88	1129	1487
3625	Columbia Falls (nr)(17)	Apr-Sept	2171	95	1655	2297
		Apr-July Apr-June	2064 1806	95 95	1568 1379	2180 1901
-/	FLATHEAD RIVER					
3630	Columbia Falls (at)(17)	Apr-Sept Apr-July	5663 5238	90 90	4989 4583	6299 5846
3000	D-3 ()(2d)	Apr-June	4506	90	3808	4993
3720	Polson (near)(18)	Apr-Sept Apr-July	6738 6236	90 90	5702 5260	7463 6939
		Apr-June	5332	90	4393	5896
3700	SWAN RIVER Big Fork (near)	Ann Cont	616	06	r22	613
7100	big fork (near)	Apr-Sept Apr-July	546	96 96	533 472	641 568
	DI AGYEROOM DITTED	Apr-June	442	96	393	460
3400	BLACKFOOT RIVER Bonner (near)	Apr-Sept	1044	104	723	1000
7400	Zeimer (hear)	Apr-July	943	104	638	907
	FLINT CREEK	Apr-June	805	104	542	775
3301	Boulder Creek (below)(13)	Apr-Sept	81.8	110		74.6
	MIDDLE FORK ROCK CREEK	Apr-July	67.4	110		61.2
3320	Philipsburg (near)	Apr-Sept	86.1	107		80.2
		Apr-July	78.2	108		72.1

⁽¹³⁾ Sum, Flint Creek at Maxville and Boulder Creek at Maxville.

⁽¹⁷⁾ Corrected for storage in Hungry Horse Reservoir.
(18) Corrected for storage in Hungry Horse Reservoir and Flathead Lake.

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PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY



					(1000	Acre Feet)
	_(FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	CLARK FORK RIVER					
3404	Milltown (above)(14)	Apr-Sept	873	107	706	815
24-4	1122200411 (40000)(14)	Apr-July	770	107	614	716
		Apr-June	655	107	510	609
3405	Missoula (above)	Apr-Sept	1917	106	1430	1814
	(2000)	Apr-July	1713	106	1252	1620
		Apr-June	1460	105	1052	1384
3530	Missoula (below)	Apr-Sept	3343	99	2720	3361
	(Apr-July	3040	99	2456	3059
		Apr-June	2609	100	2088	2608
3545	St. Regis (at)	Apr-Sept	4534	100	3492	4549
		Apr-July	4123	100	3118	4140
		Apr-June	3557	100	2640	3550
3890	Plains (near)(18)	Apr-Sept	11577	93	9431	12337
		Apr-July	10524	93	8569	11316
		Apr-June	9100	94	7154	9625
3920	Whitehorse Rapids (at)(19)	Apr-Sept	13000	93	10459	13932
		Apr-July	11800	93	9469	12763
		Apr-June	10190	94	7933	10816
	WEST FORK BITTERROOT RIVER	-				
3425	Conner (near)(15)	Apr-Sept	167	95		176
		Apr-July	155	95		164
	BITTERROOT RIVER					
3440	Darby (near)	Apr-Sept	545	93	532	587
		Apr-July	507	93	490	547
		Apr-June	445	93	422	477
3528	Missoula (at)(16)	Apr-Sept	1426	92	1291	1557
		Apr-July	1327	92	1204	1450
		Apr-June	1149	92	1037	1244
0.1555	BLODGETT CREEK					
3475	Corvallis (near)	Apr-Sept	43.5	93		46.7
		Apr-July	41.2	93		44.4

⁽¹⁴⁾ Difference in observed flow, Clark Fork above Missoula & Blackfoot near Bonner. (15) Corrected for storage in Painted Rocks Reservoir.

⁽¹⁶⁾ Difference in observed flow, Clark Fork above and below Missoula. (18) Corrected for storage in Hungry Horse Reservoir and Flathead Lake.

⁽¹⁹⁾ Corrected for storage in Hungry Horse, Flathead Lake and Noxon Reservoirs.



			(1000 Acre Feet)			
		FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	MIS	SOURI RIVER	BASIN			
	DED DOOK DEED					
0110	RED ROCK RIVER					
0110	Kennedy Ranch (at)	Apr-Sept	60.6	79	54.5	76.6
07.0		Apr-July	55.7	79	49.6	70.8
0125	Monida (near)(1)	Apr-Sept	68.2	79	60.0	86.4
		Apr-July	64.8	79	57.6	82.2
	BIG HOLE RIVER					
0255	Melrose (near)	Apr-Sept	700	91	681	770
		Apr-July	648	91	636	714
	BOULDER RIVER					
0330	Boulder (near)	Apr-Sept	89.0	111	81.3	79.9
		Apr-July	85.2	111	78.3	76.5
	JEFFERSON RIVER					
0345	Sappington (at)	Apr-Sept	934	87	972	1074
		Apr-July	830	87	871	958
	MADISON RIVER				-,-	,,,,
0375	West Yellowstone (near)	Apr-Sept	184	85	209	216
	, ,,,	Apr-July	139	84	161	165
0385	Grayling (near)(2)	Apr-Sept	387	86	430	448
		Apr-July	308	86	331	357
0410	McAllister (near)(3)	Apr-Sept	663	87	722	756
·	(44-44)	Apr-July	530	86	565	613
	GALLATIN RIVER	iipi o daj	750	00		019
0435	Gateway (near)	Apr-Sept	504	110	455	459
	(1001)	Apr-July	434	110	385	395
	HYALITE CREEK	Apr our	424	110	707	272
0500	Bozeman (near)(4)	Apr-Sept	38.4	106	39.4	36.1
0,00	Dozoman (near)(4)	Apr-July	33.5	100		-
	GALLATIN RIVER	wbra arra	22.5	107	34.3	31.0
0525	Logan (at)	Ann - Co-+	£20	104	611	100
0)~)	nogan (au)	Apr-Sept	520	106	511	492
		Apr-July	446	106	439	422

Corrected for storage in Lima Reservoir.
 Corrected for storage in Hebgen Lake.
 Corrected for storage in Hebgen and Ennis Lakes.
 Corrected for storage in Middle Creek Reservoir.



AS OF MARCH 1, 1964

				(1000 Acre Fee		
		FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	MISSOURI RIVER					
0545	Toston (at)(3)	Apr-Sept	2130	91	2199	2342
		Apr-July	1840	91	1917	2030
0908	Fort Benton (at)(5)	Apr-Sept	3174	88		3599
7.005	77:77- (+)//)	Apr-July	2690	88 86		3076
1095	Virgelle (at)(6)	Apr-Sept	3772 3250	86 86		4393 3803
1150	Zortman (near)(6)	Apr-July Apr-Sept	4100	85		4806
1170	Zor uman (near)(0)	Apr-July	3540	85		4143
1320	Fort Peck Dam (below)(7)	Apr-Sept	3951	83		4761
		Apr-July	3471	83		4181
1770	Wolf Point (near)(7)	Apr-Sept	4300	82		5261
		Apr-July	3800	82		4652
3300	Williston, N.D. (nr)(8)	Apr-Sept	10250	82	10687	12499
	PRICKLY PEAR CREEK	Apr-July	9000	81	9590	11085
0615	Clancy (near)	Apr-Sept	27.6	115	19.4	23.9
001)	Clancy (near)	Apr-July	24.1	116	17.0	20.8
	SUN RIVER	npr ours	~401	110	17.0	~0.0
0786	Gibson Dam (at)(10)	Apr-Sept	508	86	387	588
		Apr-July	465	86	343	538
	MARIAS RIVER	•				
0995	Shelby (near)	Apr-Sept	530	80	310	659
		Apr-July	482	80	288	605
	SOUTH FORK MUSSELSHELL R.					
1185	Martinsdale (above)	Apr-Sept	60.4	113	45.0	53.6
	MILK RIVER	Apr-July	58.0	113	43.1	51.4
1350	Eastern Crossing (at)	Mar-Sept	190	75		255
1000	raggern orogarna (gr)	Har -pebe	170	1)		~))

(5) Corrected for storage in Canyon Ferry Reservoir.

⁽³⁾ Corrected for storage in Hebgen and Ennis Lakes.

⁽⁶⁾ Corrected for storage in Canyon Ferry and Tiber Reservoirs.

 ⁽⁷⁾ Corrected for storage in Canyon Ferry, Tiber and Fort Peck Reservoirs.
 (8) Corrected for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill and Boysen Reservoirs.

⁽¹⁰⁾ Corrected for storage in Gibson Reservoir and diversions.



		FORECAST	FORECAST	PERCENT	MEASURE	D FLOW
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
	YELLOWSTONE RIVER					
1915	Corwin Springs (at)	Apr-Sept	1800	91	1935	1980
		Apr-July	1500	91	1638	1649
1925	Livingston (near)	Apr-Sept	2063	92	2128	2252
		Apr-July	1706	92	1791	1863
2145	Billings (at)	Apr-Sept	3750	88	3976	4261
		Apr-July	3220	88	3482	3657
3090	Miles City (at)(12)	Apr-Sept	5540	82	6301	6721
		Apr-July	4837	82	5653	5883
3295	Sidney (near)(12)	Apr-Sept	5650	82		6921
		Apr-July	4975	81		6136
	SHIELDS RIVER					
1935	Clyde Park (at)	Apr-Sept	115	104	101	111
		Apr-July	107	104	93.5	103
2000	BOULDER RIVER					
	Big Timber (at)	Apr-Sept	347	89		387
		Apr-July	314	89		353
	STILLWATER RIVER					
2050	Absarokee (near)(11)	Apr-Sept	554	89	610	620
		Apr-July	467	89	524	523
	CLARKS FORK RIVER					
2075	Chance (at)	Apr-Sept	525	85	593	617
		Apr-July	470	85	546	552
2085	Edgar (at)	Apr-Sept	547	84	617	652
		Apr-July	483	84	559	575
	ROCK CREEK	•				
2095	Red Lodge (near)	Apr-Sept	97.6	87	111	112
	<u> </u>	Apr-July	75.0	87	88.4	86.3
		•	·		•	_

⁽¹¹⁾ Corrected for storage in Mystic Lake.(12) Corrected for storage in Buffalo Bill and Boysen Reservoirs.



	•	AS OF MA	RCH 1, 1	.964			(Inches)
		(C	URRENT DATA		PAST R	
	SNOW COURSE		DATE	SNOW DEPTH	WATER	WATER C	ONTENT
NO.	NAME	ELEVATION	SURVEY	DEFIN	CONTENT	LAST YEAR	AVERAGE
		00110/074	n ====================================				
		COLUMBIA	KIVER B	ASIN			
KOOTENAI	RIVER						
15B11	Baree Creek	5500	2/27	106	31.8	_	_
14A04	Brush Creek	5000	2/28	36	11.8	5.2	13.4*
BC 10	Fernie	3500	- /			2.0	9.1
BC 12A	Field	4200	2/29	20	4.2	4.5	5.5
BC 43 BC 33	Gray Creek	5100	2/26 2/29	51	14.7	14.3	16.7* 13.3*
BC 20B	Kicking Horse Kimberley	5400 3800	2/29	40 24	11.8 6.7	11.9 4.4	7.6
BC 32	Marble Canyon	5000	3/2	46	11.6	7.0	13.2*
BC 10B	Morrissey Ridge	6100	2/~	40	11,0	-	
BC 10A	New Fernie	4100				8.1	13.1*
15A01	Red Mountain	6000	3/2	44	12.7	11.9	18.0
BC 8A	Sinclair Pass	4500	3/2	22	4.3	2.9	5.7*
BC 20A	Sullivan Mine	5100	2/28	33	9.9	9.2	13.1*
BC 41	Upper Elk River	4400	3/1	25	9.0	2.7	8.2*
14A07	Weasel Divide	5450	3/3	84	30.7	25.2	29.6*
FLATHEAD	RIVER						
14B03	Bassoo Peak	5150	2/24	32	8.6	5.0	_
13A11	Beaver Lake	5900	2/27	55	17.9	_	-
13B03	Big Creek	6750	2/28	97	35.6	35.0	36.6
13A17	Camp Misery	6400	2/25	105	37.0	27.3	_
13A02	Desert Mountain	5600	2/25	41	12.2	9.4	14.1*
13B04 13B12	Fatty Creek	5500 6300	2/28 2/27	63 85	20.4 30.2	14.3	_
14A09	Gunsight Lake Griffin Creek Divide	5150	2/27	34	10.0	5.0	_
14A03	Hell Roaring Divide	5770	2/27	70	23.8	22.0	26.9*
13B13	Holbrook	4530	2/27	32	9.8	6.4	9.9*
14A06	Kishenehn	3890	2/29	30	8.1	5.9	10.5*
14A05	Logan Creek	4300	2/28	28	7.4	4.4	9.0*
13A05	Marias Pass	5250	2/28	41	12.0	9.5	17.4
13A16	Mineral Creek	4000	3/3	59	18.4	10.6	20.4*
13B07	North Fork Jocko	6330	2/29	110	41.0	34.4	38.3
13B02	Spotted Bear Mt.	7000	2/27	35	11.3	7.6	14.8*
13A10 13B01	Strawberry Lake Trinkus Lake	5600 6500	2/28 2/28	94 101	32,2 35.3	23.3 24.2	33.7* 36.3*
13B11	Twin Creeks	3580	2/20	37	12.2	6.0	11.2*
13B05	Upper Holland Lake	7000	2/28	80	28.0	20.0	28.4*
	* *		•				•



		AS OF MA	non I,	1904			(inches)
				CURRENT DATA		Y PAST	RECORD
	SNOW COURSE		DATE	SNOW DEPTH	WATER	WATER	CONTENT
NO.	NAME	ELEVATION	SURVEY	JC. 1	CONTENT	LAST YEAR	AVERAGE
CLARK	FORK RIVER						
13013 12B10 12B11 13B10 13C09 13C11 13C10 15C01 13C04 15B02 13C21 13C22 13C08 13C12 13C03 13C02 13C18 13C05 13C07	Black Pine Copper Creek Cotter Mine Coyote Hill El Dorado Mine Fred Burr Pass Gold Creek Lake Hoodoo Creek Intergaard Lookout Lubrecht Forest No. 3 Lubrecht Forest No. 4 Lubrecht Forest No. 6 Red Lion Skalkaho Summit Slide Rock Mountain Spring Gulch Southern Cross Storm Lake	7100 5700 6250 4200 7800 8000 7200 6200 6450 5250 5450 4650 4040 7100 7260 7100 6500 7780	2/26 2/24 2/28 2/25 2/25 2/28 2/25 2/28 2/27 2/29 2/29 2/29 2/29 2/29 2/28 2/27 3/2 2/28	45 47 47 30 61 69 48 103 30 89 30 21 23 48 69 44 42 26 38	12.6 13.1 13.6 8.7 18.4 20.3 14.4 37.4 7.2 31.7 8.0 4.8 5.4 13.0 20.5 13.0 11.1 7.2	10.8 - 7.4 17.4 22.7 12.3 28.0 6.8 19.3 5.0 2.2 3.3 15.6 18.4 11.4 9.6 5.7 11.6	- 9.9* 17.3* 23.5* 13.4* 46.0* 6.6 34.0* 2.9* 3.4* 14.4* - 12.5* - 5.0 11.6*
13C06 13C01 14B01	Stuart Mill Stuart Mountain TV Mountain	6500 7400 6800	2/28 3/2 2/28	26 74 47	7.2 24.5 14.0	6.4 20.8 14.2	5.6 27.4* 14.9*
BITTER	ROOT RIVER						
13C16 13D01 13D02 14C05 14C07 13D16 14D02 14D01 14C06 14C04 14C08	Ambrose East Fork R. S. Gibbons Pass Lolo Pass Lost Horse Moose Creek Nez Perce Camp Nez Perce Pass Powell R. S. Savage Pass Twin Lakes	6480 5400 7100 5230 5940 6200 5580 6570 4230 6600 6510	2/25 3/2 2/26 2/27 2/28 2/27 2/27 2/27 2/27 2/28 2/28	43 28 63 76 86 52 48 49 42 64 103	12.5 7.0 18.8 28.4 30.9 16.2 16.0 16.0 15.0 22.4 36.4	10.6 5.8 16.6 17.5 17.8 8.0 9.0 7.3 18.6 27.3	- 6.5* 22.2 32.9* - 15.4 12.4* 16.8* 14.6*



AS OF MARCH 1, 1964

		AS OF MA	IRCH I, I	964			tinchesi
		. (C	URRENT DATA		PAST R	
	SNOW COURSE		DATE	SHOW	WATER	WATER C	ONTENT
NO.	NAME	ELEVATION	OF SURVEY	DEPTH	CONTENT	LAST YEAR	AVERAGE
		MISSOURI	RIVER BA	SIN			
BEAVERHI	EAD RIVER						
13D10 12E03 12D04 13D15 13D09 11E12 11E04 11E03 13E01 13E02 12E01	Bloody Dick Camp Creek Carter Creek Elk Horn Springs Gold Stone Kilgore Lakeview Canyon Lakeview Ridge Lemhi Pass Trail Creek White Pine Ridge	7600 6800 7400 7800 8100 6200 6930 7400 7480 7090 8850	2/25 2/26 2/27 3/2 2/25 2/28 2/27 2/27 2/24 2/24	34 26 19 33 41 28 31 29 32 28 21	8.6 5.7 3.6 7.1 10.8 6.9 7.0 6.6 6.8 5.7	7.6 3.0 2.6 7.7 10.8 3.6 5.8 5.6 6.0 4.6 2.8	10.0* 9.2 - 9.1 12.9* 9.5 10.5* 8.9* 7.5* 6.7* 4.6*
RUBY RIV	<u>VER</u>						
11D08 12E07 12E06	Clover Meadow Divide Notch	8600 7900 8500	2/27 2/27 2/27	50 32 42	12.6 7.8 10.8	8.6 6.4 7.0	- "
BIG HOLE	E RIVER						
13D20 13D19 13D21 13D08	Abundance Lake Darkhorse Lake Foolhen Jahnke Creek	8800 8600 8500 7340	2/27 2/27 2/27 2/25	51 65 45 33	15.0 22.1 12.4 7.8	12.2 17.9 12.3 6.1	- - 9.4*
JEFFERSO	ON RIVER						
12CO7 12CO6 12DO1	Berry Meadow Picnic Grounds Pipestone Pass	7300 6500 7200	2/27 2/28 2/28	30 19 19	7.2 4.2 4.0	6.4 4.6 4.4	- 4.7* 4.4



				, - ,			tinches
				URRENT DATA	T	Y PAST	RECORD
	SNOW COURSE		DATE	SNOW DEPTH	WATER	WATER	ONTENT
110.	NAME	ELEVATION	SURVEY	DEVIII	CONTENT	LAST YEAR	AVERAGE
MADISON	י איז ודם						
MADISON	TELVENT						
11E09	Big Springs	6500	2/26	53	14.9	9.2	20.4
11D07	Call Road	8050	2/27	38	9.0	6.8	-
11D06	Crockett Lake	8400	2/27	36	8.6	7.4	_
11E05	Hebgen Dam	6550	2/29	37	9.8	6.4	11.2
11E10	Island Park	6315	2/27	43	11.1	7.8	15.7
11D05	Jack Creek	6800	2/26	24	5.2	5.0	_
10E02	Norris Basin	7500	2/27	38	8.4	8.1	9.3*
11D03	North Meadow	7500	2/26	25	5.0	5.3	_
11E08	Valley View	6500	2/27	~) 50	14.8	8.4	14.3*
11E07	West Yellowstone	6700	2/28	33	8.3	4.9	11.3
111101	west refrews tone	0700	2/20		0.7	4.7	11.0
GALLATI	N RIVER						
10D14	Arch Falls	7350	3/1	36	10.4	_	_
11D09	Bear Basin	8150	2/29	61	17.8	_	_
						- 10 d	76.2
10D04	Devil's Slide	8100	3/1	62	20.2	19.8	16.3
10D03	Hood Meadow	6600	2/27	38	8.9	9.7	7.2
11D10	Little Park	7400	2/29	49	14.2	-	<u>-</u>
10D01	New World	6700	3/1	40	11.4	8.2	8.3*
11E06	Twenty-One Mile	7150	2/28	49	14.1	7.6	16.0
MISSOUR	I RIVER (Main Stem)						
11001	Boulder Mountain	7950	2/23	56	16.2		
12005		6200	2/29			2.1	, ,
_	Chessman Reservoir			25	6.3		4.3
9001	Crystal Lake	6100	2/28	59 57	14.4	15.4	9.9
10007	Elk Peak	8000	2/26	56 22	15.6	12.5	-
10002	Grasshopper	7000	2/26	32	7.0	5.2	4.3
10001	Kings Hill	7500	3/2	49	12.7	6.7	11.5
9A01	Rocky Boy	5200	2/29	18	4.2	6.2	4.8
12001	Stemple Pass	6900	3/1	37	10.0	7.1	9.2
12CO2	Ten Mile Lower	6250	2/29	32	8.0	5.0	6.3
12003	Ten Mile Middle	6800	2/28	42	10.7	8.4	9.2
12004	Ten Mile Upper	8000	2/28	51	14.4	10.6	11.9
SUN-TET	ON-MARIAS RIVERS						
13A15	Rodgon Poss	6900	2/27	0 2	20 /		
12B06	Badger Pass		2/27 2/28	83 25	29.4	_ / 3	6.8*
	Cabin Creek	5400 5400		25	4.9	4.3	
12B09	Five-Bull	5600 6000	2/24	24	5.4	0.9	6.2*
12A01	Freight Creek	6000	2/25	41	11.2	87	14.9*



			tinchesi					
		(CURRENT DATA			PAST RECORD		
SNOW COURSE			DATE	SNOW	WATER	WATER CONTENT		
NO.	NAME	ELEVATION	OF SURVEY	DEPTH	CONTENT	LAST YEAR	AVERAGE	
SUN-TET	ON-MARIAS RIVERS - con	ıt'd						
12B07 12B02 12B01 12B04 12B03	Goat Mountain Waldron Creek West Fork Wrong Creek Wrong Ridge	7000 5600 6000 5700 6800	2/28 2/25 2/25 2/28 2/28	33 23 37 41 50	9.8 5.0 9.4 13.5 17.3	6.6 2.8 6.3 7.8 11.3	10.7 6.5* 14.0* 14.8* 20.4*	
JUDITH	RIVER							
10006	Spur Park	8000	2/27	69	18.8	14.5	-	
MILK RIVER (Cypress Hills)								
10AA2 9AA1 10AA1 7AA1 UPPER Y	Cress Day B Cypress Park C Elkwater Lake A Val Marie D ELLOWSTONE RIVER	3450 4000 4100 2700	2/27 2/26 2/27 2/25	5 15 10 1	1.2 4.4 1.9 0.1	0.8 3.4 1.9 0.0	1.8* 5.2* 2.7* 1.5*	
10C05 9D01 10E03 10D05 10E06 9D05 10D06 10E04 9E01 10E01 10D12 10D07 10C03 10D10 10E05 10E07 9D04	Bald Ridge Camp Senia Canyon Crevice Mountain East Entrance Grizzly Peak Independence Lake Camp Lodgepole Lupine Creek Monument Peak Northeast Entrance Porcupine R. S. Sacajawea Sylvan Pass Thumb Divide Timberline Creek	7500 7890 7750 8400 7000 8400 8000 7850 8200 7300 9000 7400 6500 6550 7100 7900 8850	2/28 3/2 2/28 2/26 2/28 2/27 3/2 2/28 2/28 2/28 2/28 3/1 2/28 2/28 3/1 2/28 3/2	45 24 44 36 32 41 53 31 34 33 69 30 35 36 37 50 48	11.4 5.2 12.4 8.1 8.3 9.7 15.8 6.3 9.1 8.2 21.8 7.4 8.4 11.2 10.1 14.0 12.2	9.5 4.7 10.3 7.1 8.4 12.8 13.8 4.4 8.7 5.4 16.9 7.4 5.8 12.4 8.7 12.8	5.5* 13.8* 8.2 10.8* - 13.7* 10.0 10.6* 9.4* - 7.8 5.9 - 13.4* 21.4*	



SOIL MOISTURE DATA

AS OF MARCH 1, 1964 (Inches) PAST RECORD CURRENT DATA SOIL PROFILE SOIL MOISTURE STATION DATE SOIL MOISTURE LAST YEAR FIELD **AVERAGE 0F CAPACITY NAME NO. ELEVATION SURVEY COLUMBIA RIVER BASIN Flathead 13A02M Desert Mountain 5600 2/25 5.8 7.5 7.2 54 8.4 13A05M Marias Pass 5250 54 6.5 6.0 5.3 Clark Fork 13C15M Georgetown Lake 6450 48 8.3 2/28 2.5 3.1 13B19M Seeley Lake 4030 48 10.6 3/1 1.9 Bitterroot 13D18M Gibbons Pass 3/2 7100 48 7.1 5.5 5.8 2/27 14CO5M Lolo Pass 8.5 5250 48 5.3 MISSOURI RIVER BASIN Beaverhead 11E13M Lakeview 6700 48 15.3 2/29 8.2 7.8 Madison 10D04M Red Bluff 4800 40 2/29 4.7 1.9 2.5 Gallatin 11D02M 6.9 2/28 College Site 4856 54 14.5 12.9 9.5 11E06M Twenty-One Mile 7150 48 8.8 2/29 3.8 Missouri Main Stem 10COLM Kings Hill 7420 2/29 48 11.8 7.6 12C08M 2/28 Stemple Pass 6350 48 5.9 3.9 Yellowstone 10D11M Battle Ridge 6020 48 15.4 2/28 9.3 13.8 10D07M Northeast Entrance 48 3/1 7350 9.4 7.8 7.1

48

5850

17.8

2/28

9.0

14.3

Shields River

10C04M



RESERVOIR STORAGE DATA

AS OF FEBRUARY 29, 1964

(1000 Acre Feet)

			USEABLE STORAGE						
BASIN	RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE				
COLUMBIA RIVER BASIN									
Flathead	Hungry Horse Flathead Lake Camas <u>l</u> / Mission Valley <u>2</u> /	3,428.0 1,791.0 45.2 100.3	2,297.0 1,161.0 18.7 19.6	2,772.0 1,126.0 28.1 31.0	2,369.0** 768.7 25.1 35.5				
Clark Fork	Georgetown Lake Noxon	31.0 334.6	27.4 282.9	24.9 297.9	23.0				
Bitterroot	Como Painted Rocks	34.9 31.7	7.8 21.8	22.8	10.7 10.5**				
MISSOURI RIVER BASIN									
Beaverhead Ruby Madison Gallatin Missouri	Lima Ruby Hebgen Lake Ennis Lake Middle Creek Canyon Ferry Hauser & Helena Lake Helena Holter Lake Smith River Ackley Lake Durand Martinsdale	84.0 38.8 384.8 41.0 8.0 2,043.0 61.9 10.4 81.9 10.7 5.8 7.0 23.1	211.3 39.2 3.0 1,737.0 56.2 8.4 22.5 7.6	24.6 22.5 249.0 39.3 4.7 1,973.0 45.5 5.0 58.7 8.2 3.7 6.4 8.6	32.8 27.2** 213.9 35.9 3.8** 1,558.0** 53.8 8.1** 59.2 5.6** 3.9 4.9 9.8				
Sun-Teton	Deadman's Basin Fort Peck Gibson Willow Creek Pishkun	72.2 19,410.0 105.0 32.3 32.0	51.6 11,550.0 17.3 21.1 17.2	52.5 10,020.0 43.0 25.7 18.3	46.9** 11,180.0 63.3 19.1 18.8				
Marias	Lower Two Medicine Four Horns Swift Lake Francis Tiber	16.6 19.2 30.0 112.0 1,313.0	10.8 33.5 646.0	3.2 14.3 12.6 65.6 650.7	0 8.6 23.1 94.6 632.7**				
Milk	Fresno Nelson	127.2 66.8 66.1	36.4 31.5 17.1	43.4 44.4 36.3	63.3 34.4 20.8				
Yellowstone	Lake Sherburne Mystic Lake Tongue River Cooney	20.8 68.0 27.5	8.6 - 17.9	8.6 43.7 18.0	8.7 9.0 9.1				

^{1/2} Sum of four small reservoirs on west side of Flathead Lake. 2/2 Sum of eight small reservoirs in Mission Valley not including Jocko Lake.



Agencies Cooperating in Collecting Data Contained in this Bulletin

- U. S. Forest Service Region 1, Missoula, Montana
- U. S. Geological Survey Helena, Montana
- U. S. Army Corps of Engineers Portland, Oregon Seattle, Washington Omaha, Nebraska Riverdale, N. D.
- U. S. Indian Irrigation Service St. Ignatius, Montana
- U. S. Weather Bureau Helena, Montana
- U. S. Bureau of Sports Fisheries and Wildlife Red Rock Lakes Refuge Monida, Montana
- U. S. Bureau of Reclamation Billings, Montana Boise, Idaho
- Montana Power Company Butte, Montana
- Agricultural Experiment Station North Montana Branch Station Havre, Montana
- Agricultural Experiment Station North Montana Branch Station Havre, Montana

- National Park Service Yellowstone National Park Glacier National Park
- Montana Experiment Station Montana State College Bozeman, Montana
- Bonneville Power Administration Portland, Oregon
- Montana State University School of Forestry Missoula, Montana
- Soil Conservation Service Montana, Wyoming, Idaho
- Soil Conservation Districts
 Montana Counties
- Johnson Flying Service, Inc. Missoula, Montana
- Water Rights Branch, Dept. of Lands and Forests Victoria, British Columbia
- Department of Northern Affairs and National Resources Calgary, Alberta
- State Engineer
 Montana and Wyoming

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"The Conservation of Water begins with the Snow Survey"